

## RCS log for ri\_light.c - EXHIBIT H

RCS log for gfx/BALI/opengl.model/ri/procedural/ri\_light.c

RCS file:

/plroot/gfx/irix6.5m/.RCS/PL/BALI/opengl.model/ri/procedural/RCS/ri\_light.c,v

Working file: ri\_light.c

head: 1.65

branch:

locks: strict

access list:

symbolic names:

keyword substitution: kv

total revisions: 65; selected revisions: 65

description:

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revision 1.65

date: 1997/12/10 23:48:35; author: peeracy; state: Exp; lines: +0 -2  
split rendering from ri\_block; try to isolate gl calls  
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revision 1.64

date: 1997/12/09 18:08:57; author: peeracy; state: Exp; lines: +1 -1  
another checkpoint for supporting all shaders  
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revision 1.63

date: 1997/12/09 17:25:08; author: peeracy; state: Exp; lines: +1 -1  
checkpoint for major structural changes to support all shaders  
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revision 1.62

date: 1997/10/09 16:41:16; author: peeracy; state: Exp; lines: +35 -0  
a better break between lights on proc/pass  
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revision 1.61

date: 1997/10/09 15:55:16; author: peeracy; state: Exp; lines: +1 -250  
major overhaul; yank out assembler reader and drawing  
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revision 1.60

date: 1997/10/06 23:02:23; author: peeracy; state: Exp; lines: +1 -1  
bring viper and proc closer together  
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revision 1.59

date: 1997/10/06 21:26:06; author: peeracy; state: Exp; lines: +1 -120  
remove Dlist and replace with DlistOp alone  
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revision 1.58

date: 1997/10/06 17:15:16; author: peeracy; state: Exp; lines: +10 -81  
further unite light and surface scene graphs  
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revision 1.57

date: 1997/10/02 22:15:31; author: peeracy; state: Exp; lines: +14 -90  
getting dangerously close to illuminance working  
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revision 1.56

date: 1997/09/30 19:05:31; author: peeracy; state: Exp; lines: +32 -27  
cleanup and bug fixes for unified light/surface parsing  
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revision 1.55

date: 1997/09/30 00:29:11; author: peeracy; state: Exp; lines: +36 -64  
initialize light position; cleanup light set code

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revision 1.54  
date: 1997/09/29 23:53:47; author: peerco; state: Exp; lines: +37 -47  
now drive lights and surfaces of same linked list  
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revision 1.53  
date: 1997/09/29 17:17:38; author: peerco; state: Exp; lines: +32 -105  
move to unification of surface/light execution  
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revision 1.52  
date: 1997/09/26 23:28:42; author: peerco; state: Exp; lines: +5 -504  
last major cleanup of parsing/params for a bit  
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revision 1.51  
date: 1997/09/26 21:05:48; author: peerco; state: Exp; lines: +4 -5  
major overhaul of how we read in and parse shaders  
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revision 1.50  
date: 1997/09/25 17:52:28; author: peerco; state: Exp; lines: +6 -2  
fix temporary variable conflict between light/surface  
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revision 1.49  
date: 1997/09/25 16:44:15; author: peerco; state: Exp; lines: +1 -1  
oops; wrong sense on areafield compare  
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revision 1.48  
date: 1997/09/24 18:21:40; author: mmp; state: Exp; lines: +3 -2  
Area light sources work again.  
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revision 1.47  
date: 1997/09/24 00:59:53; author: mmp; state: Exp; lines: +0 -0  
\_Now\_ textures should be oriented properly.  
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revision 1.46  
date: 1997/09/23 16:41:48; author: peerco; state: Exp; lines: +1 -2  
have both surface and light shaders use same parse function  
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revision 1.45  
date: 1997/09/23 00:45:44; author: peerco; state: Exp; lines: +22 -48  
unify surface and light shader lookup functions  
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revision 1.44  
date: 1997/09/23 00:15:10; author: mmp; state: Exp; lines: +46 -1  
Support for illuminance() in shaders.  
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revision 1.43  
date: 1997/09/22 20:17:55; author: peerco; state: Exp; lines: +4 -4  
clean up memory manager to match viperproc  
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revision 1.42  
date: 1997/09/22 19:59:25; author: peerco; state: Exp; lines: +8 -4  
fix looping with lights bug and lighting computed N  
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revision 1.41  
date: 1997/09/22 18:20:25; author: peerco; state: Exp; lines: +4 -8  
make SHADERS colon-separated; match fbops to viperproc  
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revision 1.40  
date: 1997/09/19 00:54:38; author: peeracy; state: Exp; lines: +4 -50  
fix a couple of bugs in lighting normal vectors  
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revision 1.39  
date: 1997/09/18 22:42:28; author: mmp; state: Exp; lines: +18 -8  
Light sources before WorldBegin work correctly.  
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revision 1.38  
date: 1997/09/18 22:33:08; author: peeracy; state: Exp; lines: +2 -0  
turn off color writing when setting stencil  
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revision 1.37  
date: 1997/09/18 22:04:19; author: peeracy; state: Exp; lines: +20 -0  
set and enable stencil for light shaders  
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revision 1.36  
date: 1997/09/18 02:31:10; author: mmp; state: Exp; lines: +20 -6  
Fixed bug which caused multiple light sources to be handled  
incorrectly.  
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revision 1.35  
date: 1997/09/18 02:02:29; author: mmp; state: Exp; lines: +0 -0  
Fixed bug with directional lights: GL light wasn't positioned  
correctly (wrong sign).  
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revision 1.34  
date: 1997/09/17 23:55:19; author: mmp; state: Exp; lines: +210 -727  
Support for light source shaders.  
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revision 1.33  
date: 1997/09/11 21:38:53; author: mmp; state: Exp; lines: +11 -8  
Fixed alpha test so we use the highest-resolution table as long as possible.  
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revision 1.32  
date: 1997/09/09 19:03:56; author: mmp; state: Exp; lines: +213 -53  
Added support for ring, triangle, quad and point light sources.  
Error analysis code to dump file of per-pixel errors, for histogramming...  
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revision 1.31  
date: 1997/09/08 17:39:03; author: mmp; state: Exp; lines: +14 -10  
Fixed bug with lower resolution regions of multiresolution irradiance  
table overwriting parts of scene where higher resolution part of table  
has a more accurate value.  
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revision 1.30  
date: 1997/09/06 22:15:18; author: mmp; state: Exp; lines: +98 -71  
Receiving geometry for area lights can now be transformed w/o introducing  
error. Also miscellaneous cleanups and small fixes.  
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revision 1.29  
date: 1997/09/05 22:20:52; author: mmp; state: Exp; lines: +149 -116  
Added simulation of clip-maps for multiresolution representation of  
irradiance field for area lights.  
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revision 1.28  
date: 1997/09/05 21:23:08; author: mmp; state: Exp; lines: +254 -45

Added support for generating error images / statistics on error in images.

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revision 1.27

date: 1997/09/04 21:30:19; author: mmp; state: Exp; lines: +33 -23  
Range and resolution of irradiance field table can be set via afResolution and afRange parameters to areafield light source.

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revision 1.26

date: 1997/09/04 20:49:17; author: mmp; state: Exp; lines: +0 -1  
Fixed syntax error

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revision 1.25

date: 1997/09/04 20:42:26; author: mmp; state: Exp; lines: +12 -25  
Area lights emit from both sides now.  
Area lights and receiving geometry can be transformed arbitrarily.

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revision 1.24

date: 1997/09/03 20:43:23; author: mmp; state: Exp; lines: +279 -3  
Basic support for area light sources via irradiance vector field. Many limitations documented in code.

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revision 1.23

date: 1997/08/20 15:29:00; author: peeracy; state: Exp; lines: +152 -0  
remove init and blendinit functionality and major cleanup

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revision 1.22

date: 1997/08/12 00:56:05; author: peeracy; state: Exp; lines: +12 -0  
bypass unlit patches

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revision 1.21

date: 1997/07/21 20:31:41; author: peeracy; state: Exp; lines: +0 -17  
update to new fragment light spec

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revision 1.20

date: 1997/07/08 18:46:50; author: peeracy; state: Exp; lines: +28 -11  
update to current api implemented in opengl.model

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revision 1.19

date: 1997/06/30 21:10:40; author: peeracy; state: Exp; lines: +2 -1  
fix camera/modelview matrix manipulation for lighting

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revision 1.18

date: 1997/06/12 17:13:03; author: peeracy; state: Exp; lines: +0 -2  
convert fragment material functions to the right ones; def \_\_GL\_FUTURE in Makefile

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revision 1.17

date: 1997/06/09 21:13:15; author: airey; state: Exp; lines: +1 -1  
last set of rename changes

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revision 1.16

date: 1997/06/09 20:04:01; author: airey; state: Exp; lines: +28 -28  
rename globals

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revision 1.15

date: 1997/06/09 18:45:48; author: airey; state: Exp; lines: +7 -7

convention for globals: cap on first letter of words\n

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revision 1.14

date: 1997/06/06 23:18:05; author: peerco; state: Exp; lines: +5 -3  
magic now can do spotlight cutoff

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revision 1.13

date: 1997/05/31 01:49:34; author: peerco; state: Exp; lines: +11 -2  
add env option to choose fragment lighting

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revision 1.12

date: 1997/05/28 21:39:09; author: peerco; state: Exp; lines: +26 -0  
baby steps to per-pixel lighting

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revision 1.11

date: 1997/05/28 20:25:40; author: peerco; state: Exp; lines: +40 -154  
move light and material setting into their own functions

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revision 1.10

date: 1997/05/25 19:26:50; author: peerco; state: Exp; lines: +140 -5  
checkpoint for illuminate and freeing temps

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revision 1.9

date: 1997/05/20 20:48:31; author: peerco; state: Exp; lines: +46 -14  
fix light shader for multipass

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revision 1.8

date: 1997/05/20 18:06:52; author: peerco; state: Exp; lines: +14 -11  
more fixes for new light approach

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revision 1.7

date: 1997/05/20 16:51:45; author: peerco; state: Exp; lines: +62 -40  
rework light shader handling

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revision 1.6

date: 1997/05/16 19:23:25; author: peerco; state: Exp; lines: +20 -5  
n32 compilers, and reduce error warnings

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revision 1.5

date: 1997/05/15 16:56:29; author: peerco; state: Exp; lines: +13 -0  
added copyright notices

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revision 1.4

date: 1997/05/15 15:40:54; author: peerco; state: Exp; lines: +1 -1  
more directory isolation

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revision 1.3

date: 1997/05/13 17:52:58; author: peerco; state: Exp; lines: +0 -1  
remove ri\_dlist.h

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revision 1.2

date: 1997/05/09 16:30:15; author: peerco; state: Exp; lines: +14 -14  
rounded the corner on surface shader conversion

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revision 1.1

date: 1997/05/01 23:38:47; author: peerco; state: Exp;  
copied over from shader tree on woooooof (brisa!)